

2017 Strategic Sustainability Performance Plan  
U.S. Department of State  
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### **Policy Statement**

The U.S. Department of State is committed to minimizing its environmental footprint and contributing to solutions that address the world's environmental challenges. With American technologies and services supporting our global operations, the Department continually works to increase efficient use of natural resources, reduce operational byproduct and waste, and showcase environmental innovation.

The Department is committed to complying with all federal statutes and executive orders pertaining to energy, environment, and sustainability within its management and operations. Guided by the Department's Strategic Plan, Quadrennial Diplomacy and Development Review, and international agreements, the Department aims to establish and meet ambitious sustainability goals within its operations. Along with partners in other governments, educational and scientific institutions, and the private sector, the Department promotes global dialogue on sustainability by sharing challenges and exchanging best practices.

6/30/2017

Date



Landon C. Van Dyke  
(Acting) Chief Sustainability Officer

## Executive Summary

The mission of the U.S. Department of State is to advance the national interests of the United States and its people. Environmental issues, like drought and pollution, can threaten national and global security, as well as the economy. These concerns – as well as the opportunities they represent to share best practices and new technologies – are why the environment is part of the Department’s strategic planning and priorities.

The Department’s sustainability vision is to:

- comply with statutory requirements and executive orders pertaining to energy, environment, and sustainability within Department operations;
- enhance the Department’s security and resiliency through diversifying energy sources and reducing operational demand for energy, fuel, and water resources;
- protect the well-being of Department personnel through ensuring an environmentally safe and risk-transparent work environment;
- reduce the Department’s environmental footprint to support and showcase the United States’ international environmental and economic priorities;
- adopt next generation technology to advance sustainable operations and promote U.S. industries and solutions; and
- build bridges between management and policy to establish platforms of environmental successes that benefit diplomatic engagement and promotion of U.S. environmental products and services.

Senior-level oversight on sustainability is conducted by the Department's Greening Council. The Council meets quarterly to coordinate and catalyze vision by harnessing innovative ideas and projects from the field, as well as from our private and public sector partners. Chaired by the Under Secretary for Management, who also serves as the Department’s Chief Sustainability Officer, the Council has cross-disciplinary membership, including the Chief Information Officer, Chief Acquisition Officer, Chief Financial Officer, Senior Real Property Officers, and other senior level officials.

The Office of Management Policy, Rightsizing, and Innovation (M/PRI) serves as the Greening Council Executive Secretariat (GC-ES), providing high-level and overarching strategic guidance and coordination. GC-ES oversees and coordinates the Department’s efforts to comply with and respond to all executive orders, regulations, and reporting inquiries related to the Department’s energy, environmental and sustainability performance. GC-ES regularly reviews Department operations and works with various bureaus and offices to ensure Department personnel is informed of and is adhering to all energy, environment and sustainability requirements. GC-ES represents the Department in related White House, Congressional, and interagency working groups where energy and environmental related requirements and implementing guidance for federal agencies are developed.

The Greening Council Working Group (GC-WG) is made up of working-level directors and managers from across the Department, who work to enact goals, strategy and projects as directed by the Council. This unique group has representation from across the Department.

This vision and management structure creates a platform for continual improvement. The Department uses data from a wide range of sources – including utility consumption, acquisitions, personnel records,

and waste management – to help evaluate the success of, and identify new priorities for, sustainability-related projects and programs.

**Successes include:**

- **Energy Efficiency:** The Department's energy intensity dropped by over 16 percent this year, thanks to realized savings from utility performance contracts and ongoing facility upgrades, optimized HVAC systems, and LED upgrades.
- **Building Optimization:** The Department requires at least LEED® Silver Certification for all domestic new construction and major renovation projects on properties over 5,000 SF in our leases and construction contract specifications. In the past 12 months, the Department has added one certified project to our LEED® Silver portfolio and one certified project to our LEED® Gold portfolio, bringing our domestic total to ten LEED® Silver projects and two LEED® Gold certifications.
- **Renewable Energy:** The Department exceeds its renewable energy goals with offsite solar and wind power through an agreement with Constellation New Energy and UNICOR. The Department will continue to establish renewable energy power purchase agreements for new facilities where life cycle cost-effective. The Department is participating in the Capital Solar Challenge at its Headquarters building and will install over 180kW of solar photovoltaic panels. The Department is also currently pursuing energy conservation measures through three Utility Energy Savings Contracts (UESCs). Other renewable energy is sourced from the Department's domestic classified waste, which is handled off-site at a waste-to-energy electricity generation facility. Plans are also underway to install geothermal heat pumps and wells to condition buildings at the National Foreign Affairs Training Center (scheduled to be constructed in 2016-2018).
- **Cyber security:** Problems have been encountered in using off-the-shelf technologies for building automation systems (BAS) and advanced meter conductivity due to cyber security concerns. The Department has designed new, industry-leading systems that will enhance cyber and physical security while providing utility consumption information. The Department is working to share best practices with other agencies.

**Challenges include:**

- **Alternative Fuel Availability:** Commercially available alternate fueling infrastructure is limited in many areas of the country and particularly in the metropolitan Washington D.C. area. As a result, the Department's annual alternative fuel consumption consistently falls below targets. Until a compelling business case can be demonstrated to the commercial petroleum retail sector, the Department does not foresee substantially more alternative fuel, particularly E85, locations being added to the current inventory. The Department has worked with several other agencies, including the Department of Defense, to work on adding alternative fuel capacity, but combined AFV consumption data does not support expansion of alternative fuel capacities.
- **High costs for alternative vehicles:** GSA's high incremental costs for ZEVs/PHEVs for leased vehicles and agency budget constraints make this a difficult goal to reach.

### **Lessons learned include:**

- **The importance of communications:** employee awareness and ownership is critical, but breaking through to overscheduled and overworked employees is difficult. When possible, the Department messages through several channels, including social media, to try to get a variety of employees involved in activities. One example of this is the Department's annual Bike to Work Day celebration, which brings together employees from across the Department to learn about alternative transportation options and get a "biking buddy."

### **Selected planned actions:**

- **Domestic Green Building:** Next year we plan to add five LEED Silver or Gold projects to our portfolio.
- **GHG:** The Department is working to achieve its new Scope 1 and 2 GHG reduction target of 38.5% by FY 2025 for domestic operations. This goal will be achieved through energy efficiency, space optimization, and other similar actions.
- **Fleet Management:** The Department continues to optimize its fleet. Fuel efficiency has continued to rise, thanks to the Department's continued move towards smaller, more fuel-efficient vehicles, as well as alternative fuel vehicles. DOS currently has four BEVs and two PHEVs in the domestic fleet. Two more PHEVs are on order for FY17 replacements.

## Size & Scope of Agency Operations

Agency Size and Scope	FY 2015	FY 2016
Total Number of Employees as Reported in the President's Budget	15,544	15,634
Total Acres of Land Managed	169	169
Total Number of Buildings Owned	12	12
Total Number of Buildings Leased (GSA and Non-GSA Lease)	17	17
Total Building Gross Square Feet (GSF)	N/A	N/A
Operates in Number of Locations Throughout U.S.	12	12
Operates in Number of Locations Outside of U.S.	N/A	N/A
Total Number of Fleet Vehicles Owned	12,659	12,990
Total Number of Fleet Vehicles Leased	1,301	1,330
Total Number of Exempted-Fleet Vehicles (Tactical, Law Enforcement, Emergency, Etc.)	5,229	5,004
Total Amount Contracts Awarded as Reported in FPDS (\$Millions)	8,344	8,770

# Agency Progress and Strategies to Meet Federal Sustainability Goals

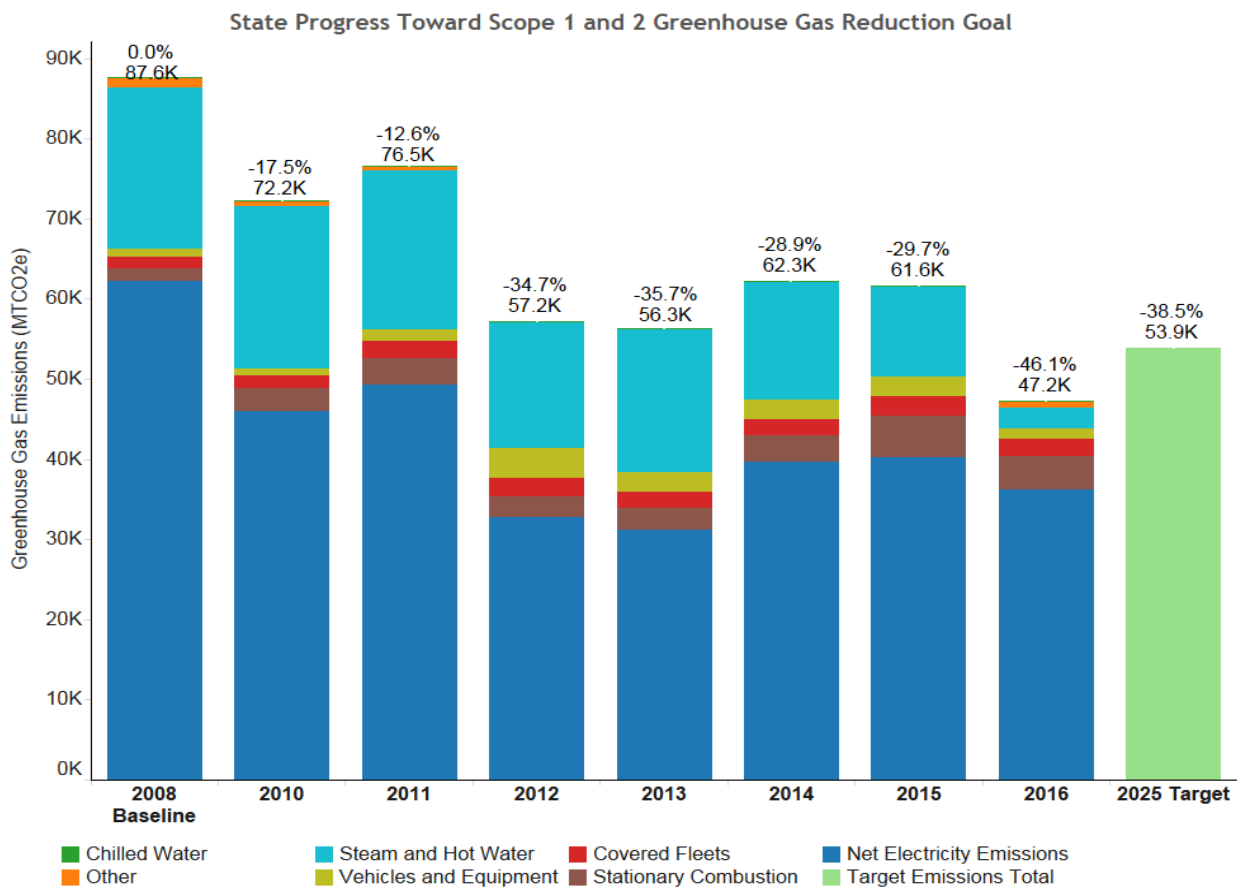
This section provides an overview of progress through FY 2016 as reported by agencies through the OMB Scorecard process on sustainability/energy goals and agency strategies to implement Executive Order 13693, *Planning for Federal Sustainability in the Next Decade*.

## Goal 1: Greenhouse Gas (GHG) Reduction

### Scope 1 & 2 GHG Reduction Goal

E.O. 13693 requires each agency to establish a Scope 1 & 2 GHG emissions reduction target to be achieved by FY 2025 compared to a 2008 baseline. The Department of State’s 2025 Scope 1 & 2 GHG reduction target is 38.5%.

Chart: Progress Toward Scope 1 & 2 GHG Reduction Goal



*The DOS is on-track to exceed its goals for Scope 1 and 2 Greenhouse Gas Reductions (GHG). DOS is one of the agencies participating in the Capital Solar Challenge and by the end of this summer we should have more renewable energy on our buildings in Washington, DC. DOS recently awarded two Utility Energy Savings Contracts (UESCs) that will further enhance our ability to reduce GHGs.*



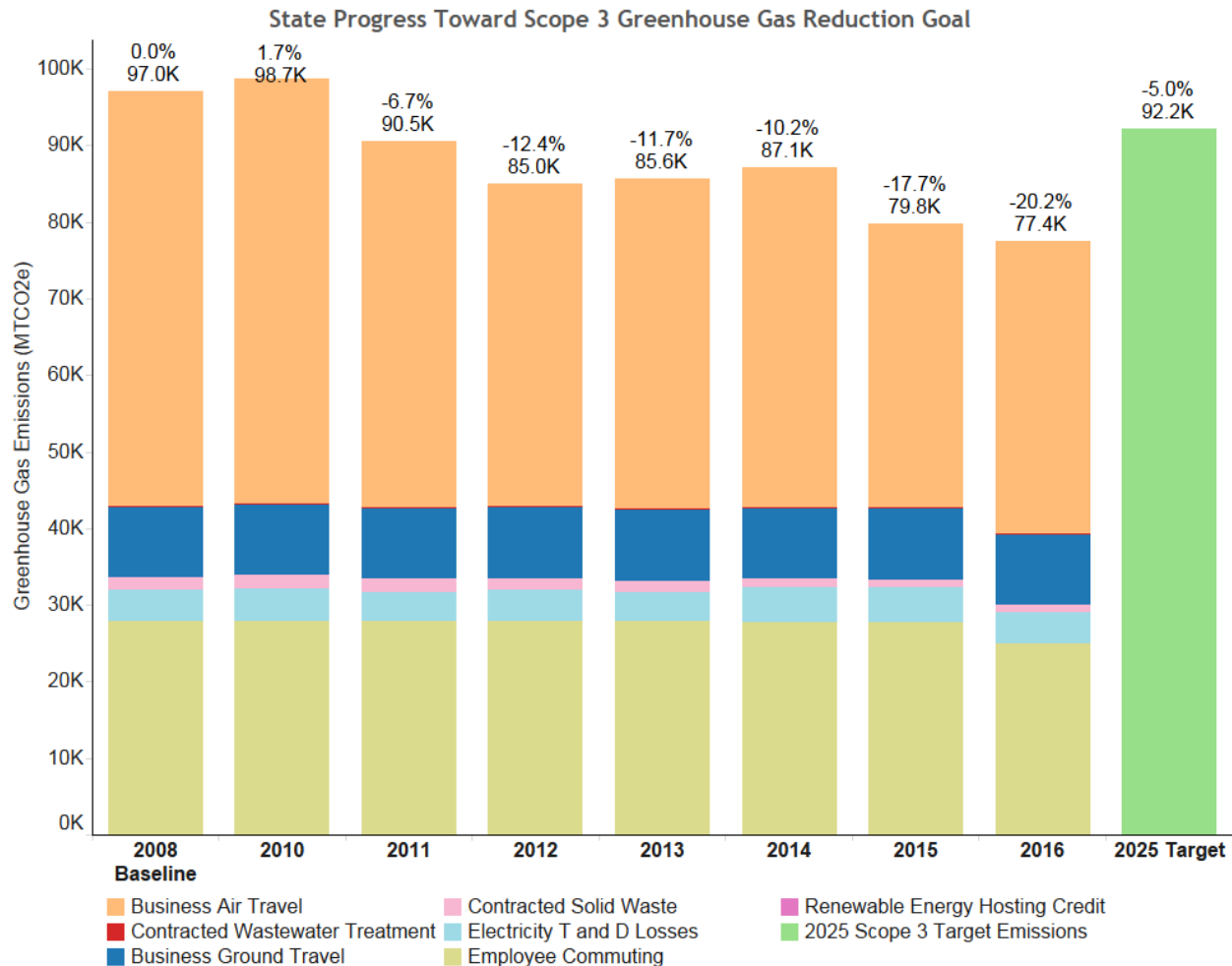
## Scope 1 & 2 GHG Reduction Strategies for Fiscal Year 2018

Strategy	Strategy Narrative	Targets and Metrics
Use the Federal Energy Management Program (FEMP) GHG emission report to identify/target high emission categories and implement specific actions to address high emission areas identified.	The Department is reviewing the report to identify priority areas for action. The Department is also conducting energy audits to identify specific projects to increase energy efficiency.	Develop an updated Data Center migration/closure plan as required by FITARA.
Identify and support management practices or training programs that encourage employee engagement in addressing GHG reduction.	Engage FEMP to provide more energy conservation/GHG training for DOS employees.	<p>All energy management personnel attended DOE Federal Energy Decision Systems (FEDS) training and are now using it to conduct energy audits.</p> <p>All DOS building managers have received Portfolio Manager training so they can easily track utility consumption.</p>
Determine unsuccessful programs or measures to be discontinued to better allocate agency resources.	<p>Problems have been encountered in using off-the shelf-technologies for building automation systems (BAS) and advanced meter conductivity due to governmental cyber security concerns.</p> <p>DOS was one of the first agencies to join the Department of Energy's Building Automation Cyber Security Working Group. This government working group's focus is to develop solutions to cyber security concerns from BAS and other facility items that relay computer information.</p>	<p>Complete the cyber security threat analysis and work with DOS cyber security personnel to mitigate cyber security risks which will allow full functionality of building automation and advanced metering systems</p> <p>Facility personnel are working with IT personnel to reduce the number of Data Centers.</p>
Employ operations and management (O&M) best practices for emission generating and energy consuming equipment.	<p>DOS is actively looking at its facilities and data centers to either develop capital improvement projects or make operational changes to reduce GHG emissions.</p> <p>DOS will incorporate FEMP training for its domestic facility managers, as well as potentially include a requirement for credentialed energy managers in large operations and maintenance contracts.</p>	<p>Track Scope 1 &amp; 2 GHG annual emissions reduction from building upgrades and operational changes.</p> <p>Inform domestic facility managers of upcoming training opportunities pertaining to reducing energy consumption and GHG emissions.</p> <p>Include the requirement for a full time energy manager in new O&amp;M contracts for large facilities or campuses.</p>

## Scope 3 GHG Reduction Goal

E.O. 13693 requires each agency to establish a Scope 3 GHG emission reduction target from 2008 baseline to be achieved by FY 2025. The Department of State's 2025 Scope 3 GHG reduction target is 5%.

**Chart: Progress Toward Scope 3 GHG Reduction Goal**



*The Department places high priority on encouraging sustainable transport to work and meetings, seeing this as a way to reduce emissions while increasing wellness. We have a fleet of free loaner bikes; two Chevy Volts, four Ford Focuses; free showers for bikers, walkers and joggers; and have workshops and events to teach bicycling skills regularly. The Department has made strides in reducing travel where possible with the help of technology such as Adobe Connect, Microsoft Lync, and other digital video conferencing tools. The Department is investigating the possibility of establishing a corporate account with the Capital Bike Share program.*

### Scope 3 GHG Reduction Strategies for Fiscal Year 2018

Strategy	Strategy Narrative	Targets and Metrics
Reduce employee business ground travel.	This is not a large source of concern for our GHG, given that most employees work relatively close to each other in DC and Rosslyn and regularly walk, bike, use the State shuttle or Metro to different offices.	Complete the DC Bike Share corporate account and evaluate shuttle bus usage in the DC area.
Reduce employee business air travel.	The Department has already reduced nonessential air travel, and continues to encourage DVCs, teleconferencing, and other methods to reduce air travel. However, given the nature of diplomatic work, in-person meetings are often needed.	Continue to track and monitor air travel and report the results in the GHG survey due the end of the year.
Develop and deploy an employee commuter emissions reduction plan.	This strategy is encompassed in the Multi-modal Access Plan (MAP) and related work the Department does to communicate about public transit, bike subsidies, and other commuting options.	The Department is executing a MAP Strategy.
Use an employee commuting survey to identify opportunities and strategies for reducing commuter emissions.	The Department regularly surveys employees to determine opportunities.	The Department will release an employee commuting survey in the fall of 2017.
Increase & track number of employees eligible for telework and/or the total number of days teleworked.	The Department tracks the number of employees eligible for telework and continues to work with managers and bureaus to increase the use of this option. All employees must complete a telework training course and fill out a form for approval. Especially with the Metro overhaul, telework visibility increased within the Department. The Department also encourages flexible schedules, such as Alternative Work Schedules, Compressed Schedules, and Flex, which can reduce the total number of days employees have to commute.	Increase the amount of telework-eligible and approved employees.  Continue to raise awareness about the benefits of teleworking among employees and managers.
Develop and implement a program to support alternative/zero emissions commuting methods and provide necessary infrastructure.	The Department is using the new requirement to create a Multi-Modal Access Plan (MAP) to identify ways to increase its awareness activities and infrastructure for alternative and zero emissions commuting methods.	The Department supported the installation of a BikeShare dock near headquarters, and created a cyclist listserv and advisory group. The Department sends out biannual messages about alternative commuting options.

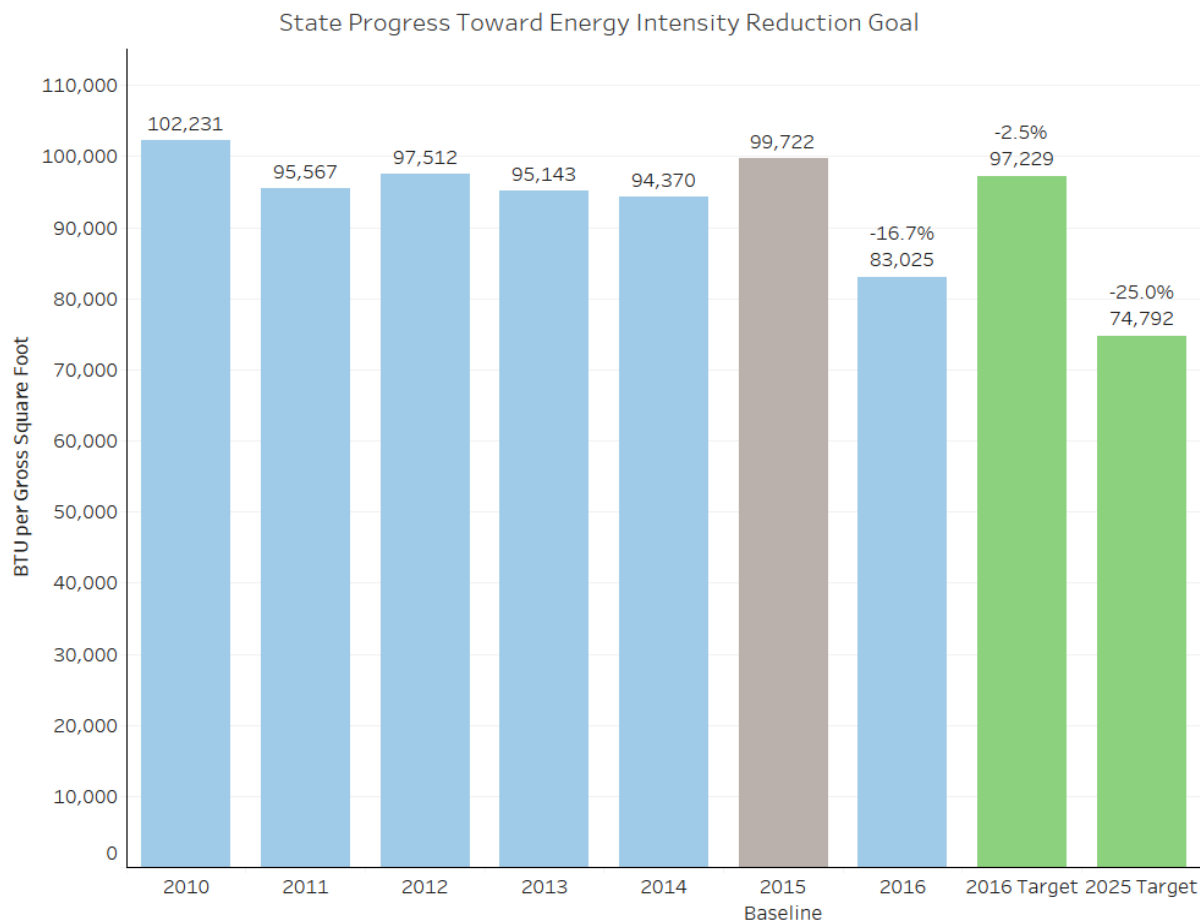
Strategy	Strategy Narrative	Targets and Metrics
Establish policies and programs to facilitate workplace charging for employee electric vehicles.	The Department has installed seven level I charging stations for POVs in accordance with the FAST Act as a trial to determine customer demand/utilization.	The level I charging stations have been available for 6 months with no customer usage. No additional stations are planned until demand increases.

Goal 2: Sustainable Buildings

Building Energy Conservation Goal

The Energy Independence and Security Act of 2007 (EISA) required each agency to reduce energy intensity 30% by FY 2015 as compared to FY 2003 baseline. Section 3(a) of E.O. 13693 requires agencies to promote building energy conservation, efficiency, and management and reduce building energy intensity by 2.5% annually through the end of FY 2025, relative to a FY 2015 baseline and taking into account agency progress to date, except where revised pursuant to Section 9(f) of E.O. 13693.

Chart: Progress Toward Facility Energy Intensity Reduction Goal



*The Department actively pursues projects to reduce energy intensity. In FY 2016, energy reductions from UESC projects that were recently completed resulted in savings. Reducing energy use is a top priority. We have partnered with DOE on conducting energy audits at our buildings and have awarded two UESC projects to help further reduce energy intensity.*

## Building Energy Conservation Strategies for Fiscal Year 2018

Strategy	Strategy Narrative	Targets and Metrics
Make energy efficiency investments in agency buildings.	<p>The Department's Sustainable Buildings Implementation Plan (SBIP) requires all domestic new construction and major renovations (involving mechanical, electrical, or plumbing infrastructure replacements) over 5,000 SF to achieve compliance with a minimum LEED® Silver rating.</p> <p>These requirements are included in our federal construction contract specifications.</p>	<p>In the past Fiscal Year, the Department added 1 certified project to our LEED® Silver portfolio.</p> <p>In the next Fiscal Year, the Department plans to add 5 certified projects to our LEED® Silver or GOLD portfolio.</p> <p>For projects involving LEED® certification and in compliance with LEED® credit requirements, we will develop and implement a measurement and verification plan covering 1 year post-construction occupancy to verify that energy efficiency targets are met.</p> <p>The Department is transitioning to the 2016 Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (GP). During this transition, the Department will use the green building rating system to document compliance with the 2016 GPs.</p>
Use remote building energy performance assessment auditing technology	<p>The Department's enterprise metering network allows us to do remote building energy performance assessment for some of our facilities.</p> <p>The Department is evaluating both an on-site energy auditing program (FEDS) and a remote auditing program (First Fuel) for ease of use and for actionable building upgrades.</p>	<p>Build Federal Energy Decision Systems (FEDS) Models from as-built drawings for more DOS buildings.</p> <p>Awarded a contract to First Fuel to analyze five DOS buildings using 15 minute interval data.</p>

Strategy	Strategy Narrative	Targets and Metrics
<p>Redesign interior space to reduce energy use through daylighting, space optimization, and sensors and control systems.</p>	<p>The Department's Sustainable Buildings Implementation Plan (SBIP) requires all domestic new construction and major renovations (involving mechanical, electrical, or plumbing infrastructure replacements) over 5,000 SF to achieve a minimum LEED® Silver rating.</p> <p>These requirements are included in our federal construction contract specifications.</p>	<p>In the past Fiscal Year, the Department added 1 certified project to our LEED® Silver portfolio.</p> <p>In the next Fiscal Year, the Department plans to add 5 certified projects to our LEED® Silver or GOLD portfolio.</p> <p>When feasible, the Department will utilize daylighting, space optimization, and sensors and control systems to minimize power requirements for lighting. The Department's target Utilization Rate is 180 (Usable Square Feet per Occupant). Except where mission requirements dictate deviation, all of our new construction and major renovation projects for FY18 are targeted to meet or exceed this metric.</p>
<p>Install and monitor energy meters and sub-meters.</p>	<p>Advanced meters have been extensively deployed at many DOS facilities. The meters are in place but we still have some issues with connectivity due to cyber security issues. We are actively participating with the DOE Building Automation Cyber Security working group to help resolve this issue.</p> <p>Continue to work with IT personnel to identify Power Usage Effectiveness (PUE) of Data Centers.</p> <p>Evaluate moving metering and data to a cloud environment.</p>	<p>Complete building automation and advanced meter cyber security threat analysis and develop an implementation plan to resolve network support issues.</p> <p>Continue surveying Data Centers to develop a PUE monitoring plan.</p>
<p>Collect and utilize building and facility energy use data to improve building energy management and performance.</p>	<p>Continue to benchmark our building utility use in EnergyStar Portfolio Manager and target EnergyStar score improvement in all of our buildings.</p>	<p>Achieve EnergyStar certification in our buildings.</p>

Strategy	Strategy Narrative	Targets and Metrics
Ensure that monthly performance data is entered into the EPA ENERGY STAR Portfolio Manager.	<p>Benchmark our building energy use in EnergyStar Portfolio Manager.</p> <p>Continue to provide training to building staff and new employees on how to use Portfolio Manager.</p> <p>Continue to obtain Energy Star Certifications for buildings with a score of 75 or higher.</p>	<p>Benchmark monthly energy use in EnergyStar Portfolio Manager for all domestic owned and operated buildings.</p> <p>Train all building managers to use Portfolio Manager.</p>



## Building Efficiency, Performance, and Management Goal

Section 3(h) of E.O. 13693 states that agencies will improve building efficiency, performance, and management and requires that agencies identify a percentage of the agency's existing buildings above 5,000 gross square feet intended to be energy, waste, or water net-zero buildings by FY 2025 and implementing actions that will allow those buildings to meet that target. The Department of State does not target any of our projects to achieve net-zero compliance by 2025 due to prohibitive expense and/or limited technology available. As opportunities allow, the Department will periodically reevaluate.

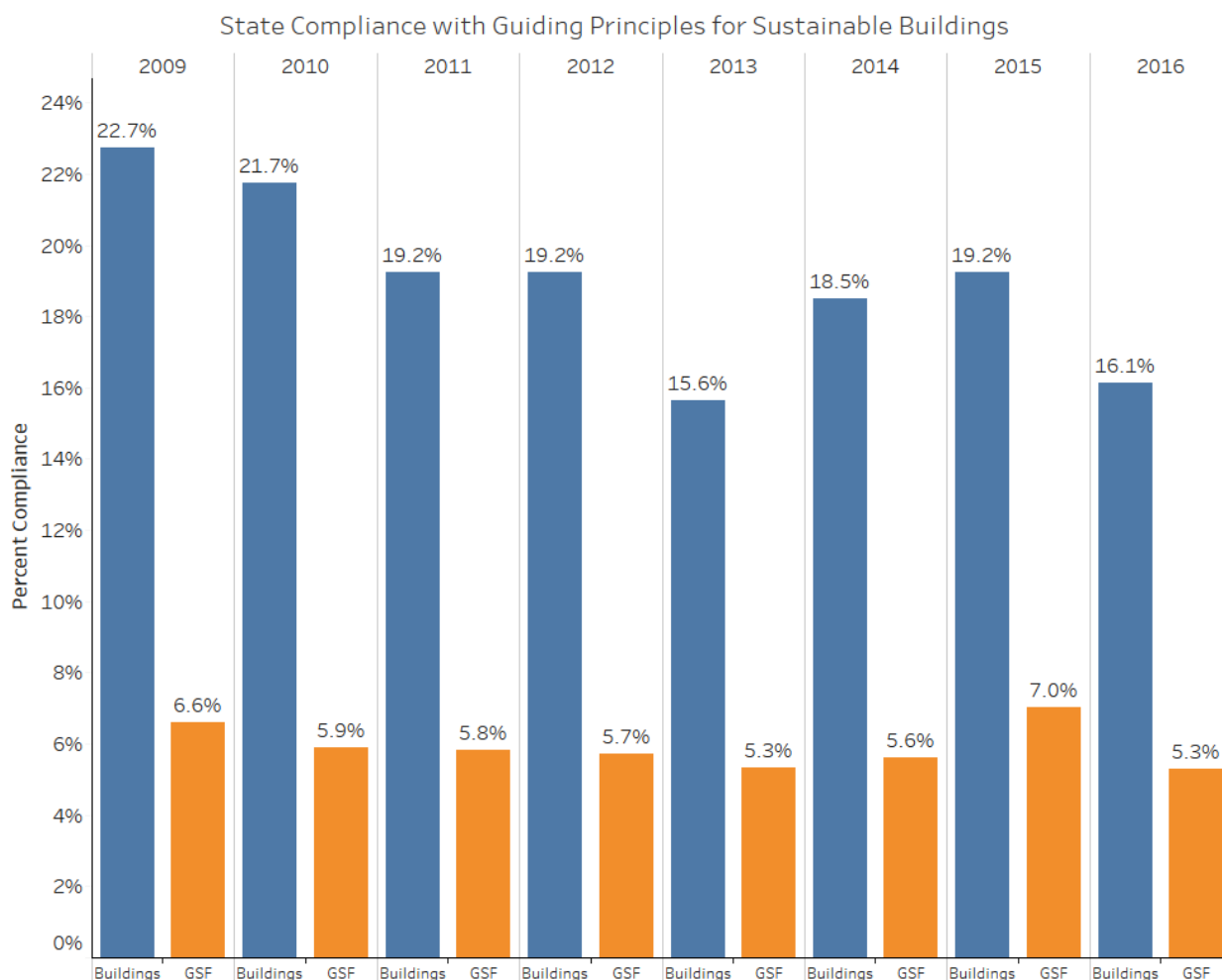
### Guiding Principles for Sustainable Federal Buildings

Section 3(h) of E.O. 13693 also states that agencies will identify a percentage, by number or total GSF, of existing buildings above 5,000 GSF that will comply with the *Guiding Principles for Sustainable Federal Buildings (Guiding Principles)* by FY 2025.

The Department of State's FY 2025 target is 30% of 70 federal buildings.

*(Agencies' 2025 targets should be at least 10% higher than current (2015) level of achievement.)*

### Chart: Percent of Buildings Meeting the Guiding Principles



## Sustainable Buildings Strategies for Fiscal Year 2018

Strategy	Strategy Narrative	Targets and Metrics
Include climate resilient design and management into the operation, repair, and renovation of existing agency buildings and the design of new buildings.	Consider climate resilience in the selection of new office locations and incorporate resilient design and management practices into new construction and major renovations (involving mechanical, electrical, or plumbing infrastructure replacements).	For all new construction and major renovation projects, mission criticality, floodplain considerations and facility adaptation are considered and incorporated into site selection, design and operation as appropriate.
In planning new facilities or leases, include cost-effective strategies to optimize sustainable space utilization and consideration of existing community transportation planning and infrastructure, including access to public transit.	<p>The Department's SBIP requires all domestic new construction and major renovations (involving mechanical, electrical, or plumbing infrastructure replacements) over 5,000 SF to achieve compliance with a minimum LEED® Silver rating.</p> <p>These requirements are included in our federal construction contract specifications.</p> <p>In addition, the Department is working to consolidate offices within the Springfield, Foggy Bottom and Rosslyn areas. The Department's shuttles service these areas. Foggy Bottom and Rosslyn are convenient to mass transit, pedestrian walk ways and biker paths. The Department, through GSA, typically leases and renovates existing buildings rather than building new facilities.</p>	<p>In the past Fiscal Year, the Department added 1 certified project to our LEED® Silver portfolio.</p> <p>In the next Fiscal Year, the Department plans to add 5 certified projects to our LEED® Silver or GOLD portfolio.</p> <p>The Department is transitioning to the 2016 Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (GP). During this transition, the Department will use the green building rating system to document compliance with the 2016 GPs.</p>

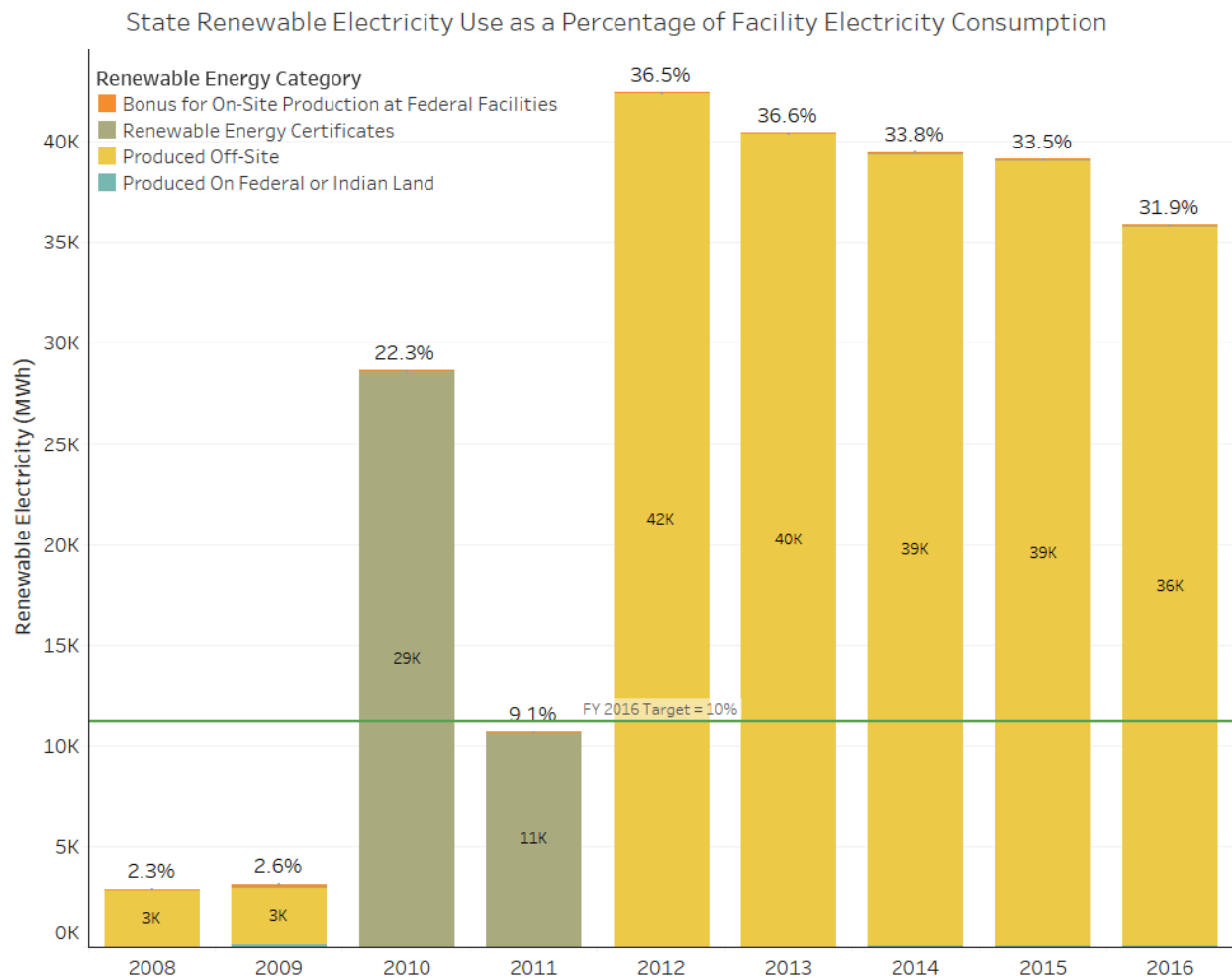
Strategy	Strategy Narrative	Targets and Metrics
<p>Incorporate green building specifications into all new construction, modernization, and major renovation projects.</p>	<p>The Department's SBIP requires all domestic new construction and major renovations (involving mechanical, electrical, or plumbing infrastructure replacements) over 5,000 SF to achieve a minimum LEED® Silver rating.</p> <p>These requirements are included in our federal construction contract specifications.</p> <p>The Department embraces all local natural resources management requirements.</p>	<p>In the past Fiscal Year, the Department added one certified project to our LEED® Silver portfolio.</p> <p>In the next Fiscal Year, the Department plans to add five certified projects to our LEED® Silver or GOLD portfolio.</p> <p>The Department is transitioning to the 2016 Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (GP). During this transition, the Department will use the green building rating system to document compliance with the 2016 GPs.</p>
<p>Implement space utilization and optimization practices and policies.</p>	<p>The Department actively uses its Space Allocation Standards and Building Design Guidelines to standardize space allocations and improve utilization rates. Also, the Department utilizes an internal Building Advisory Committee to evaluate Bureau-proposed projects for adherence to space standards and design guidelines.</p> <p>The Department aims to achieve a minimal UR in all new construction and major renovation projects.</p>	<p>The Department's target UR is 180 (Usable Square Feet per Occupant). Except where mission requirements dictate deviation, all of our new construction and major renovation projects for FY18 are targeted to meet or exceed this metric.</p>

### Goal 3: Clean & Renewable Energy

#### Clean Energy Goal

E.O. 13693 Section 3(b) requires that, at a minimum, the percentage of an agency's total electric and thermal energy accounted for by clean energy (i.e., renewable and alternative energy) shall be not less than: 10% in FY 2016-17; 13% in FY 2018-19; 16% in FY 2020-21; 20% in FY 2022-23; and 25% by FY 2025.

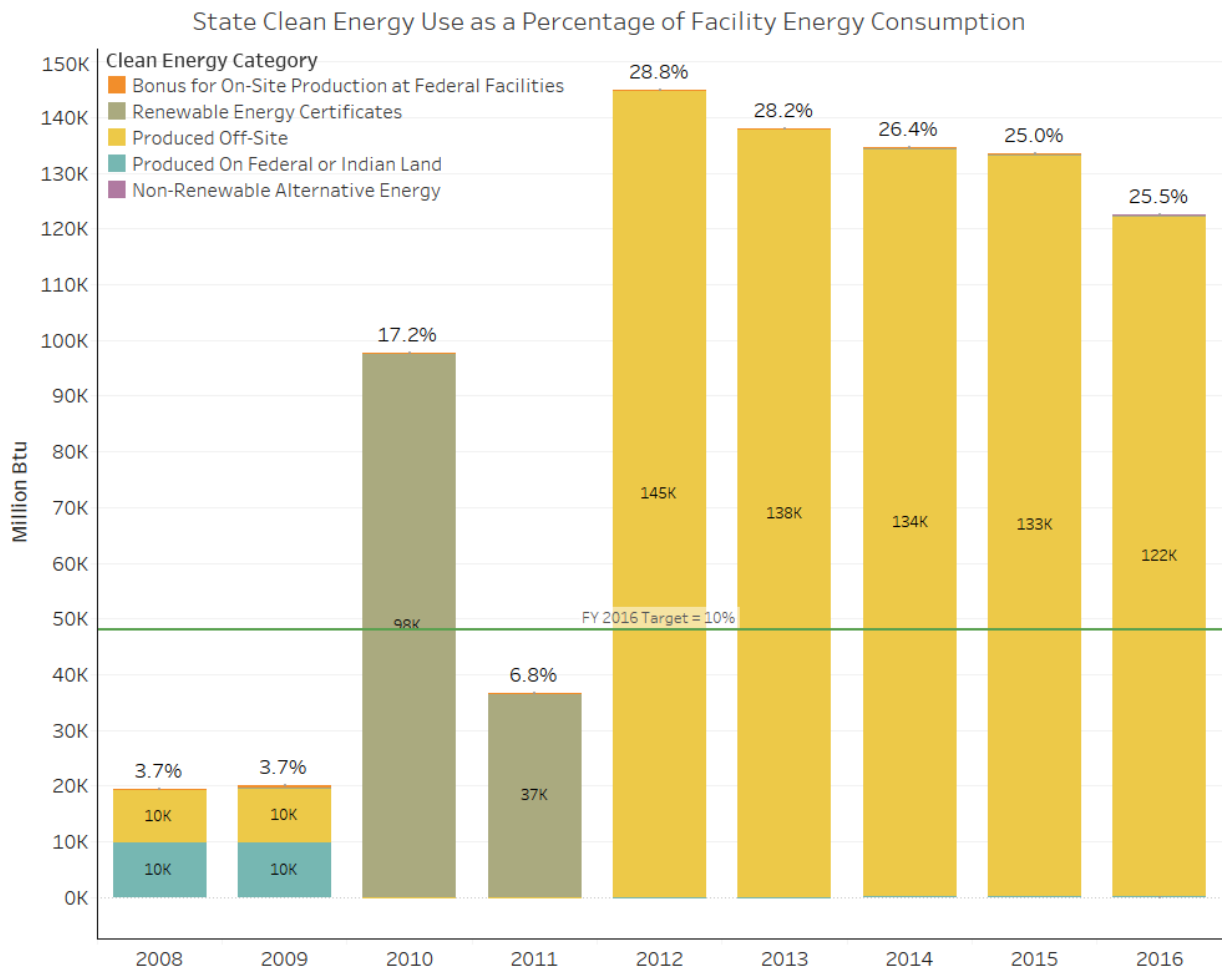
## Chart: Use of Clean Energy as a Percentage of Total Electric Energy and Thermal Energy



### Renewable Electric Energy Goal

E.O. 13693 Section 3(c) requires that renewable energy account for not less than 10% of total electric energy consumed by an agency in FY 2016-17; 15% in FY 2018-19; 20% in FY 2020-21; 25% in FY 2022-23; and 30% by 2025.

## Chart: Use of Renewable Energy as a Percentage of Total Electric Energy



*The State Department has made significant gains in renewable energy use in the past through the use of renewable power purchase agreements. DOS will continue to establish renewable energy power purchase agreements for new facilities where life cycle cost effective. DOS is one of the participating Agencies in the Capital Solar Challenge which will provide additional on-site renewable energy.*

## Clean and Renewable Energy Strategies for Fiscal Year 2018

Strategy	Strategy Narrative	Targets and Metrics
Purchase of energy that includes installation of renewable energy on-site at a federal facility or off-site from a federal facility.	Continue to establish renewable energy power purchase agreements for new facilities where life cycle cost effective.	Verify renewable energy was delivered to our DC metro area facilities through our Constellation Energy Savings Agreement.  Continue to work with Washington Gas, who was awarded the contract from GSA on the Capital Solar Challenge to install solar power at two buildings.
Utilize the Renewable Energy Planning and Optimization (REopt) tool to prioritize and/or identify clean/renewable energy potential and projects that the agency can implement by FY2020.	Continue to use the tools in REopt such as PVWatts, OpenStudio, etc. to identify potential locations for renewable energy projects.  Request FEMP provide REopt training for our employees.	Complete PVwatts analysis for all of our owned and delegated buildings.  Host a multiagency REopt training class at one of our computer training centers.
Install on-site thermal renewable energy and retain corresponding renewable attributes or obtain equal value replacement RECs.	Install geothermal and solar hot water heating systems where resources, life cycle cost analysis and site conditions allow.	Review and approve design of geothermal heat pump system for the Foreign Affairs Security Training Center to be constructed FY2017-2019.
Install on-site combined heat and power processes.	DOS will evaluate the feasibility for combined heat and power systems.	Complete a waste to energy study at our Kentucky site and see if a CHP unit is feasible.

Goal 4: Water Use Efficiency & Management

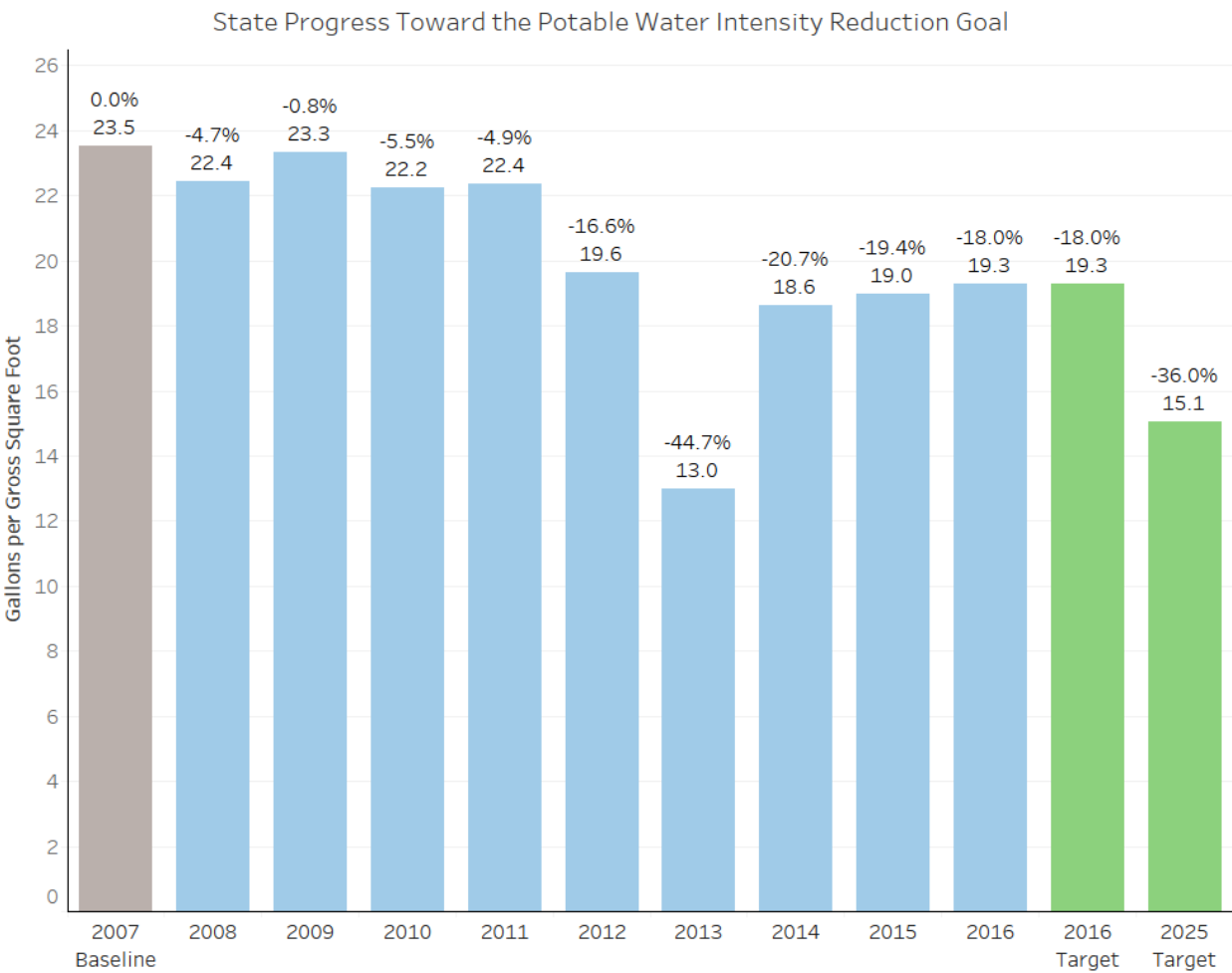
Potable Water Consumption Intensity Goal

E.O. 13693 Section 3(f) states that agencies must improve water use efficiency and management, including stormwater management, and requires agencies to reduce potable water consumption intensity, measured in gallons per square foot, by 2% annually through FY 2025 relative to an FY 2007 baseline. A 36% reduction is required by FY 2025.

Industrial, Landscaping and Agricultural (ILA) Water Goal

E.O. 13693 section 3(f) also requires that agencies reduce ILA water consumption, measured in gallons, by 2% annually through FY 2025 relative to a FY 2010 baseline.

Chart: Progress Toward the Potable Water Intensity Reduction Goal



*The Department of State is on-track to meet its goals for water conservation. Ongoing and future UESCs and building renovations will include the installation of low flow fixtures and in some cases rain water harvesting. We will continue to look for ways to manage storm water, harvest rain water, and reuse cooling tower water.*

## Water Use Efficiency & Management Strategies for Fiscal Year 2018

Strategy	Strategy Narrative	Targets and Metrics
Install green infrastructure features to assist with storm and wastewater management.	For all domestic new construction and major renovation, evaluate the life cycle cost effectiveness of installing appropriate green infrastructure features to help with storm- and wastewater management.	Review cost analysis for each project and either proceed with installation or document decision not to install.
Utilize ESPC/UESCs to reduce water consumption and ensure all ESPC/UESCs consider water reduction strategies.	Continue to utilize UESC for water conservation projects.	Continue to monitor the Measurement and Verification (M&V) reports to ensure water savings are achieved from UESC Projects.  Install condensate recovery system as part of the upgrades to the HVAC system at the Harry S. Truman building.
Install and monitor water meters and utilize data to advance water conservation and management.	Ensure each facility domestically owned or operated by the DOS has water meters installed.  Consider the use of water sub-metering for more precise data or when cost savings can be achieved (e.g., reducing sewer charges due to cooling tower evaporation).  Monitor water meters at each facility to determine water use and identify opportunities for conservation and management.	Monitor water meters to determine water consumption at each facility, identify trends, and identify opportunities for water conservation and management.  Verify water meter data has been recorded in Portfolio Manager.
Install high efficiency technologies, e.g. WaterSense fixtures.	For all domestic new construction and major renovation, install high efficiency technologies where life cycle cost effective. High efficiency technologies will also be considered during performance contracting.	Document installed high efficiency technologies. This information will be tracked through third party green building certifications for water efficiency credit or through M&V data for performance contracts to document water consumption reduction.
Minimize outdoor water use and use alternative water sources as much as possible.	Domestic building managers have been instructed not to install new irrigation systems unless an alternative water source is available. All new landscape design is required to be native/drought tolerant/low water consuming plants	Ensure native/low water landscaping is used during new building construction and major renovations.  Document outdoor water use from alternative water sources.



Strategy	Strategy Narrative	Targets and Metrics
Ensure that planned energy efficiency improvements consider associated opportunities for water conservation.	<p>Ensure contracts for energy upgrades look for water conservation opportunities, such as rain water harvesting, cooling tower blow down water reuse, etc.</p> <p>Evaluate anti-scaling concentrations in cooling tower water to see if we can reduce the amount of blowdown water.</p>	<p>Verify all UESCs and Capital Improvement projects incorporate water savings technologies.</p> <p>Install condensate recovery system as part of the upgrades to the HVAC system.</p>

## Goal 5: Fleet Management

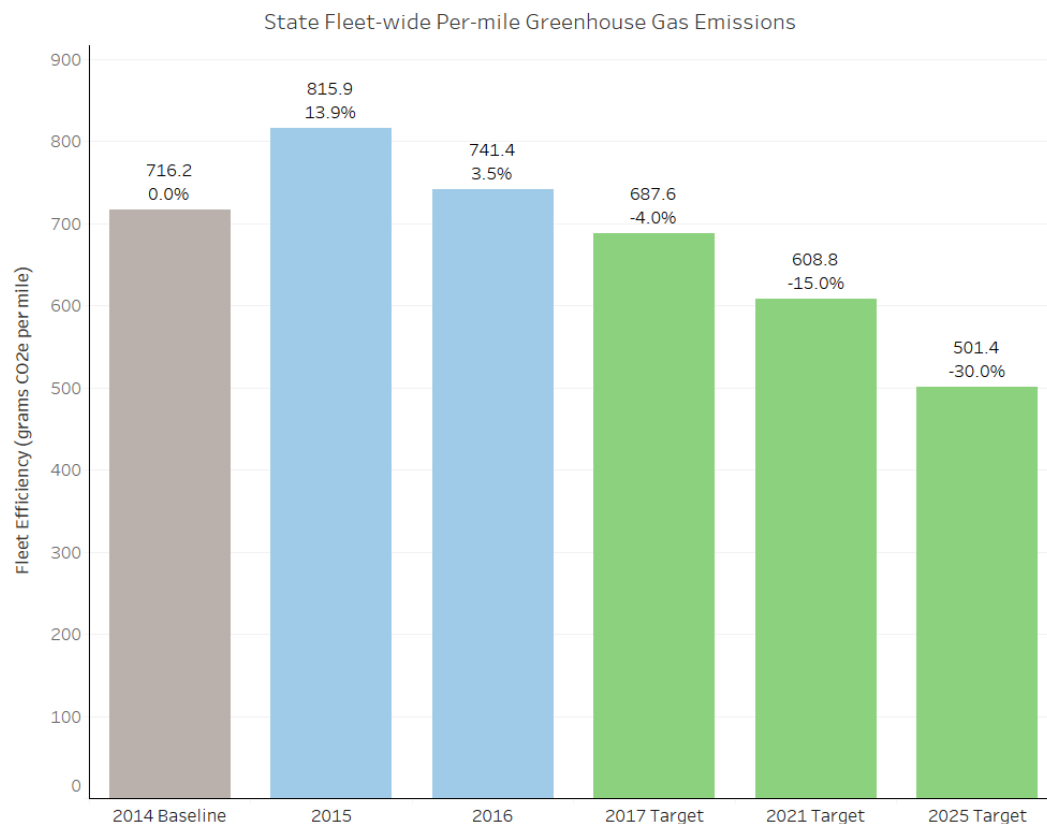
### Fleet Per-Mile Greenhouse Gas (GHG) Emissions Goal

E.O. 13693 Section 3(g) states that agencies with a fleet of at least 20 motor vehicles will improve fleet and vehicle efficiency and management. E.O. 13693 section 3(g)(ii) requires agencies to reduce fleet-wide per-mile GHG emissions from agency fleet vehicles relative to a FY 2014 baseline and sets new goals for percentage reductions: not less than 4% by FY 2017; not less than 15 % by FY 2020; and not less than 30% by FY 2025.

DOS's GHG emissions in FY 2016 were 741 gCO<sub>2</sub>e/mile (see chart below), which was a substantial decrease from the FY 2015 GHG emissions spike. The increase in FY 2015 was due mainly to increased mission requirements that dictated greater usage of some vehicles. The FY 2016 total fell short of the target of 702 gCO<sub>2</sub>e/mile, resulting in DOS having a status of non-compliance for the GHG emissions reduction requirement. However, the FY 2016 GHG emissions reduction of close to ten percent clearly shows a positive trend based on the FY 2014 baseline of 716 gCO<sub>2</sub>e/mile. DOS is working hard to continue this downward trend, taking proactive steps in monitoring driver behavior to include idling, rapid starts, and sudden stops.

E.O. 13693 Section 3(g)(i) requires that agencies determine the optimum fleet inventory, emphasizing eliminating unnecessary or non-essential vehicles. DOS has continued its efforts to optimize fleet size both domestically and overseas by the use of the Vehicle Allocation Methodology (VAM) process, which is detailed in the Fleet Management Plan (FMP). The FMP and VAM Report are included as appendices to this plan.

### Chart: Fleet-wide Per-mile GHG Emissions



## Fleet Alternative Fuel Consumption Goal

The Energy Independence and Security Act of 2007 (EISA) requires that, not later than October 1, 2015 and each year thereafter, each Federal agency achieve a ten percent increase in annual alternative fuel consumption, compared to a FY 2005 baseline. By FY 2016, agencies were to have increased alternative fuel use by 175.3% relative to FY 2005. In addition, OMB has asked all agencies to achieve a minimum of 5% alternative fuel use of their total fuel consumption.

DOS' use of alternative fuel (AF) in FY 2016 equaled three (3) percent of total fuel use. DOS has not met the mandate to increase its overall AF use by 175.3% since FY 2005. The primary reason for not meeting the mandate is the limited availability, within reasonable distances of DOS vehicle operations, of B20 (a fuel blend of 20% biodiesel and 80% petroleum diesel), compressed natural gas (CNG) and E85 (a fuel blend of 85% ethanol and 15% gasoline). DOS contacted various entities in the metropolitan area of Washington, DC in an effort to increase the availability and use of AFs in FY 2016. DOS will continue to be proactive with GSA, DOE and other federal agencies and local entities in an effort to increase availability of AFs in the DC metro area.

## Fleet Management Strategies for Fiscal Year 2018

Strategy	Strategy Narrative	Targets and Metrics
Collect and utilize agency fleet operational data through deployment of vehicle telematics.	The DOS Fleet Management Council (FMC) created a sub-committee to address the vehicle telematics deployment requirement. DOS utilizes Drive Cam in both overseas and domestic operations. A customized solution for telematics overseas is being developed that will meet operational requirements.	DOS will continue utilizing DriveCam in limited locations to improve safety. DOS plans to continue meeting EO 13693 mandates by installing telematics as we develop appropriate security measures.
Ensure that agency annual asset-level fleet data is properly and accurately accounted for in a formal Fleet Management Information System as well as submitted to the Federal Automotive Statistical Tool reporting database, the Federal Motor Vehicle Registration System, and the Fleet Sustainability Dashboard (FLEETDASH) system.	DOS acquired a fleet management information system (FMIS) in FY 2010 that conforms to the standards published in GSA's Bulletin B-15. FMIS is used to manage fleet accounting and utilization data and is integrated with the DOS' property management software program. Enhancements have been made to our FMIS to meet the requirements of asset level reporting.	DOS is currently testing FY17 data in the INL sandbox to ensure all data will meet FAST reporting requirements.
Increase acquisitions of zero emission and plug-in hybrid vehicles.	DOS' goal is to comply with the EO 13693 ZEV/PHEV requirements for domestic vehicles. The eligible domestic fleet is made up mostly of GSA-leased vehicles. As these vehicles are due for replacement our plan is to do so with BEVs, PHEVs or HEVs where feasible (e.g.: high vehicle incremental costs).	DOS currently has four BEVs and two PHEVs in the domestic fleet. Two more PHEVs are on order for FY17 replacements. This makes up a total of 3% of the eligible domestic fleet.

Strategy	Strategy Narrative	Targets and Metrics
Issue agency policy and a plan to install appropriate charging or refueling infrastructure for zero emission or plug-in hybrid vehicles and opportunities for ancillary services to support vehicle-to-grid technology.	DOS added four level II electric vehicle charging stations in CY16 to bring our total to six at the present time. We also added seven Level I charging stations and made them available for privately owned BEVs/PHEVs.	DOS will continue working with owners of leased buildings for availability of level I charging and potential installation of level II charging in the future where feasible, as funding becomes available and customer demand increases for private BEV charging.
Increase utilization of alternative fuel in dual-fuel vehicles.	DOS will continue efforts to increase consumption of alternative fuels (AFs) through fuel use tracking and reporting missed opportunities for refueling with AFs to vehicle custodians, along with assistance in identifying AF sources.	DOS will continue informing the vehicle custodians with low AF use in dual-fuel vehicles of their need to contribute to reducing the fleet-wide per-mile greenhouse gas emissions.
Minimize use of law enforcement exemptions by implementing GSA Bulletin FMR B-33, <i>Motor Vehicle Management, Alternative Fuel Vehicle Guidance for Law Enforcement and Emergency Vehicle Fleets</i> .	469 of the GSA-leased vehicles in the domestic law enforcement (LE) fleet are flex fuel capable.	The FMP is available as an appendix for more information on the LE flex-fuel vehicles and other aspects of the fleet.

# Goal 6: Sustainable Acquisition

## Sustainable Acquisition Goal

E.O. 13693 section 3(i) requires agencies to promote sustainable acquisition by ensuring that environmental performance and sustainability factors are considered to the maximum extent practicable for all applicable procurements in the planning, award and execution phases of acquisition.

## Biobased Purchasing Targets

The Agricultural Act of 2014 (Public Law 113-79) amends Section 9002 (a)(2)(A)(i) of the Farm Security and Rural Investment Act of 2002 to establish a targeted biobased-only procurement requirement under which the procuring agency shall issue a certain number of biobased-only contracts when the procuring agency is purchasing products, or purchasing services that include the use of products, that are included in a biobased product category. Therefore agencies are to establish an annual target for increasing the number of contracts to be awarded with BioPreferred and biobased criteria and the dollar value of BioPreferred and biobased products to be delivered and reported under those contracts in the following fiscal year.

*For FY 2018, the Department of State has established a target of 75 contracts and \$50,000,000 in biobased products to be delivered.*

**Chart: Percent of Applicable Contracts Containing Sustainable Acquisition Requirements**

# of Contracts Reviewed	Percentage Compliant
80	100.0%

## Sustainable Acquisition Strategies for Fiscal Year 2018

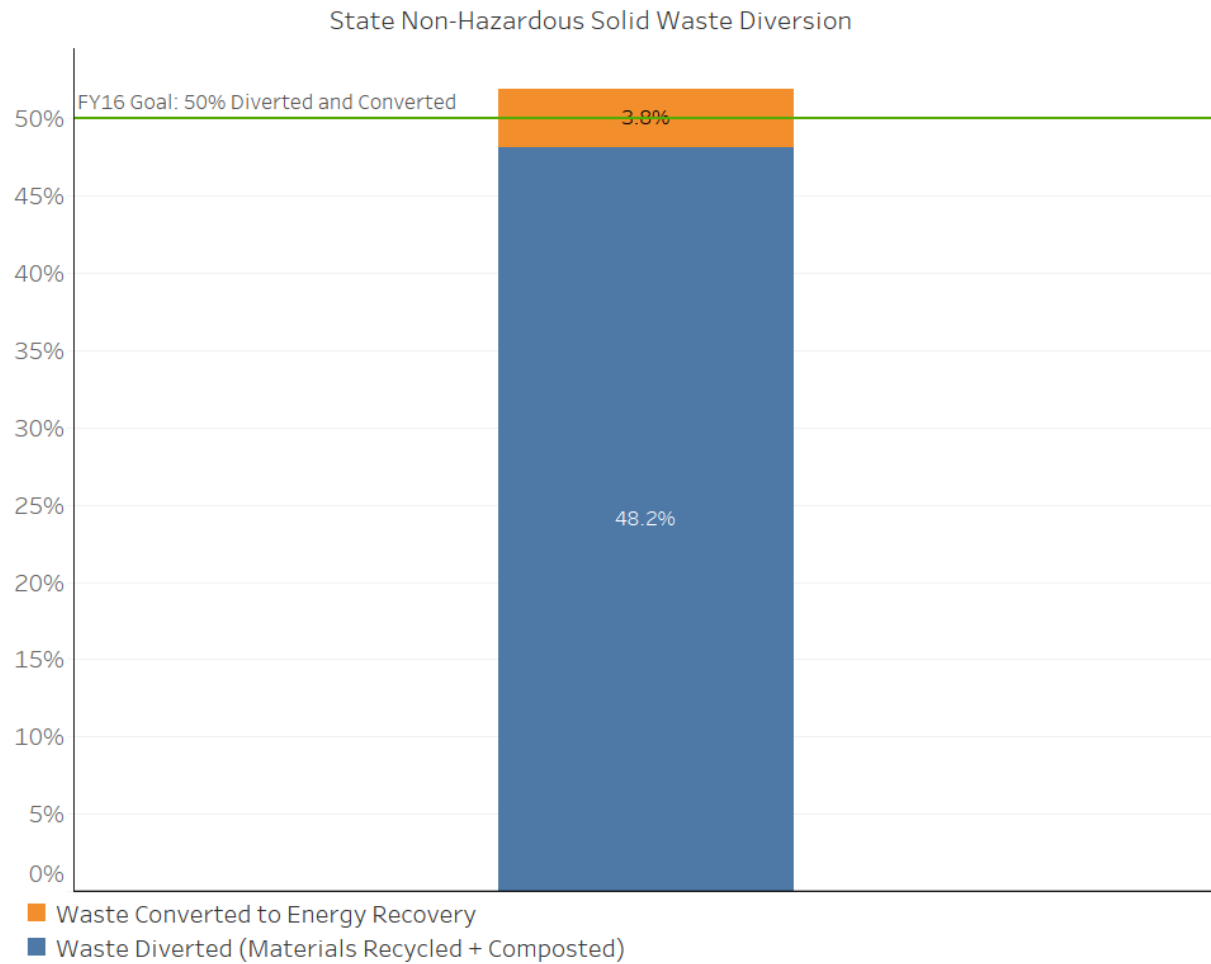
Strategy	Strategy Narrative	Targets and Metrics
Use Category Management Initiatives and government-wide acquisition vehicles that already include sustainable acquisition criteria.	State participates in the Government-wide category management efforts including using acquisition vehicles that already include sustainable acquisition criteria and laptop/desktop vehicles through NASA Solutions Wide Enterprise Procurement (SEWP) in accordance with OMB guidelines.	Throughout FY 2018, State will be fully responsive to OMB category management requests and requirements including analyzing State's spending under our sustainable acquisition criteria and continuing to use Federal Strategic Sourcing Initiative (FSSI) solutions where appropriate.
Identify and implement corrective actions to address barriers to increasing sustainable acquisitions.	The Department reviews quarterly and updates related specifications to ensure inclusion of sustainable acquisition language in contracts.	State will continue to adhere to such compliance reviews but will encourage showcasing green initiatives and awareness to the COR council and the bi-annual COR Workshops.
Improve quality of data and tracking of sustainable acquisition through the Federal Procurement Data System (FPDS).	Will continue to improve quality of data and tracking of sustainable acquisition through the Federal Procurement Data System (FPDS) by properly identifying the right POC codes for the appropriate requirements.	Continue to perform quarterly reviews if greening elements using FPDS and manual file reviews. DOS will incorporate data quality training and provide informational material educate procurement staff on sustainability requirements and proper FPDS coding.
Incorporate compliance with contract sustainability requirements into procedures for monitoring contractor past performance and report on contractor compliance in performance reviews.	Ensure that contractor performance reviews include consideration of sustainability compliance.	Incorporate training to the CORs on when/how to consider sustainability compliance and how to document those considerations in Contractor Performance Assessment Reporting System (CPARS) reports. Following FY17, work on including in CPARS data quality reviews a metric to determine that sustainability compliance is adequately considered in relevant reviews.

# Goal 7: Pollution Prevention & Waste Reduction

## Pollution Prevention & Waste Reduction Goal

E.O. 13693 section 3(j) requires that Federal agencies advance waste prevention and pollution prevention and to annually divert at least 50% of non-hazardous construction and demolition debris. Section 3(j)(ii) further requires agencies to divert at least 50% of non-hazardous solid waste, including food and compostable material, and to pursue opportunities for net-zero waste or additional diversion.

### Chart: Waste Diversion



*The Department is evaluating ways to increase waste converted to energy. The ongoing major renovation in our headquarters building is expected to achieve a 90% diversion rate of Construction Debris (C&D). A composting pilot test is being conducted at one of our facilities and results will determine if expanding the composting effort in the future is viable.*

## Pollution Prevention & Waste Reduction Strategies for Fiscal Year

Strategy	Strategy Narrative	Targets and Metrics
Report in accordance with the requirements of sections 301 through 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (42 U.S.C 11001-11023).	The Department will submit Tier II reports annually as required.	Submit Tier II reports to local and state emergency responders prior to reporting deadline.
Reduce or minimize the quantity of toxic and hazardous chemicals acquired, used, or disposed of, particularly where such reduction will assist the agency in pursuing agency greenhouse gas reduction targets.	Domestically, the Department makes no direct purchase of toxic or hazardous chemicals. Contracts for facilities operations and maintenance contain language requiring use of environmentally preferable products. Domestic building construction and renovation follow green building practices per GSA PBS P100.  The Department's Affirmative Procurement Program contains guidance for the purchase of non-ozone depleting substances. CFCs are being phased out of all domestic facilities owned and operated domestically. O&M contracts require HFC management training, equipment for refrigerant recycling and certification of individuals performing refrigerant recovery.	Ensure all new and renewing contracts contain environmentally preferable purchase requirements verified by contract compliance audit.  All major renovation and construction projects in excess of 5,000 SF are required to demonstrate toxic and hazardous chemical reduction through product submittals and 3rd party sustainable building certification.  Continue conducting environmental audits at our facilities and ensure excess Hazardous Substances are properly disposed of.



Strategy	Strategy Narrative	Targets and Metrics
<p>Reduce waste generation through elimination, source reduction, and recycling.</p>	<p>The Department has implemented several product substitution, waste reduction and recycling initiatives, and service contract modifications to reduce the variety and amounts of waste generated at domestic facilities. The Department is committed to achieving waste reduction through diversion of non-hazardous solid waste. The Domestic Design Guidelines and Building Standards include waste minimization requirements following the hierarchy of reduction, reuse, recycling, and disposal.</p> <p>Ensure Construction debris is tracked and reported.</p> <p>Continue to strive to increase the recycling program.</p>	<p>Promote and monitor waste diversion to support Department goal of at least 50% diversion of non-hazardous solid generated from routine activities.</p> <p>Verification through tracking of reports from waste/recycling contractors.</p> <p>Our new classified waste disposal process has allowed us to greatly reduce the amount of disposal performed at our headquarters facility. The majority of disposal is now handled via incineration offsite by a waste-to-energy electricity generation facility.</p> <p>Continue to offer employees opportunities to recycle e-waste and other hard-to-recycle items at work through campaigns on Earth Day and America Recycles Day.</p> <p>All renovation projects have Construction Debris containers.</p>
<p>Implement integrated pest management and improved landscape management practices to reduce and eliminate the use of toxic and hazardous chemicals and materials.</p>	<p>All pest management activities are conducted in accordance with Integrated Pest Management (IPM) best practices to reduce the amount of pesticides required to be applied.</p> <p>Ensure maintenance contractors are familiar with the IPM requirements.</p>	<p>Verify that adherence to the IPM is mandatory for all contractors.</p>

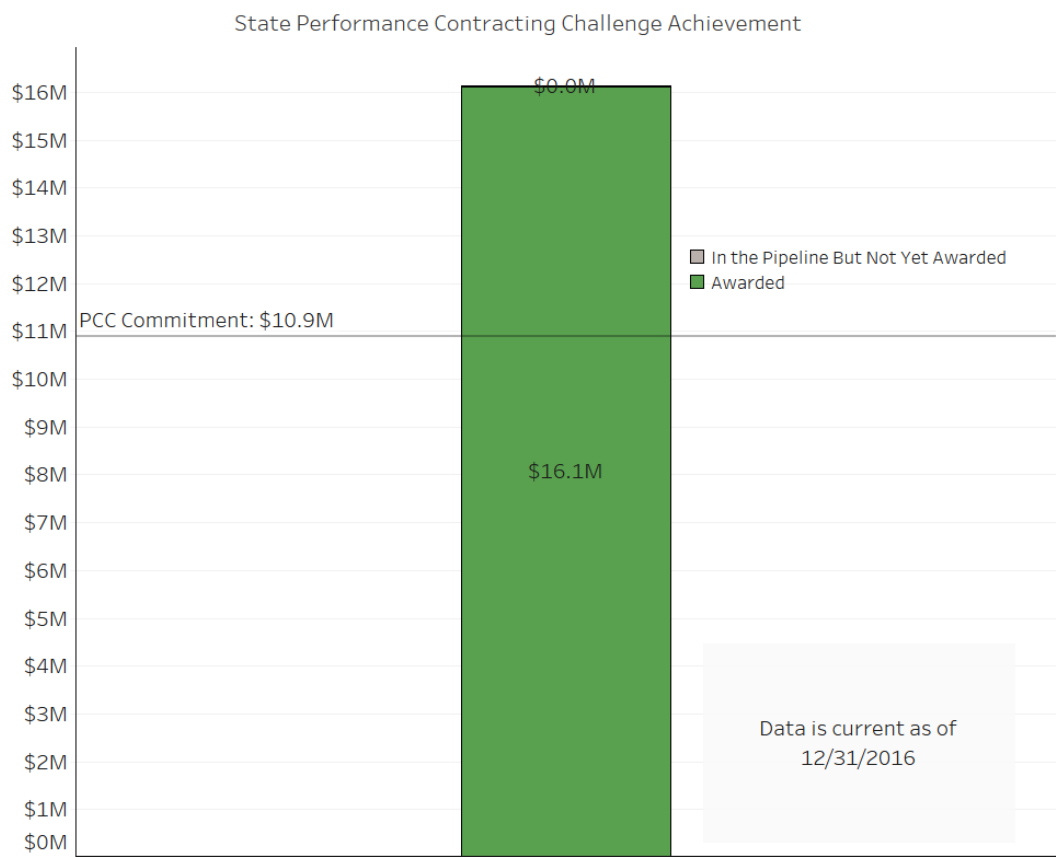
# Goal 8: Energy Performance Contracts

## Performance Contracting Goal

E.O. 13693 section 3(k) requires that agencies implement performance contracts for Federal buildings. E.O. 13693 section 3(k)(iii) also requires that agencies provide annual agency targets for performance contracting. The Department of State targets for the next two fiscal years are:

FY 2018: \$ 0.0  
FY 2019: \$ 0.0

Chart: Progress Toward Target under the 2016 Performance Contracting Challenge<sup>1</sup>



*By FY 2016 the Department of State exceeded its Performance Contracting Challenge commitment by nearly \$5M. In early FY 2017, two more UESC Projects valued at \$15.4M were awarded; thus the Department is well above its goal in this area. The Department's use of Performance Contracting has really helped reduce its overall energy intensity. Due to the significant current commitment to Performance Contracting and the two and half year project schedule, the Department is not planning additional Performance Contracting in FY 2018 and FY 2019.*

<sup>1</sup> This is the only chart that will include progress through 12/31/2016 versus FY16 performance.

## Performance Contracting Strategies for Fiscal Year 2018

Strategy	Strategy Narrative	Targets and Metrics
Utilize performance contracting and incorporate use of ESPCs and UESCs into planning activities to meet identified energy & water efficiency and Administration objectives while deploying life-cycle cost effective infrastructure projects, with clean energy technology, energy and water & other savings measures.	DOS has ongoing UESCs to meet energy efficiency, water conservation, and renewable energy goals.  Evaluate the possible use of using UESCs or ESPCs at other DOS Facilities.	Continue to support the HST Phase II and ICC UESCs valued at nearly \$15M.  Work with FEMP to find other UESC opportunities.
Evaluate the top 25% of agency's most energy intensive buildings for opportunities to implement comprehensive ESPC/UESC projects.	DOS will audit its facilities using a combination of remote auditing tools and on-site auditing tools as required and evaluate the use of UESC/ESPCs to implement energy and water conservation measures as part of the audit process.	Audit 25% of DOS owned and delegated buildings per year. Audits will identify potential projects for performance contracting.
Identify potential onsite renewable energy projects in a specified percentage of performance contracts.	Where resources, life cycle cost analysis and site conditions allow, install on-site renewable energy generation through performance contracts or other contract mechanisms.  Conduct PVWatts analysis of our facilities to determine potential solar generation rates.	Support the completion of the Capital Solar Challenge on HST.  Use PVWatts data to verify if projects can be completed by a performance contract.
Ensure agency legal and procurement staff are trained to use performance contracts effectively.	Numerous DOS employees have been trained by FEMP and we have an efficient process for performance contracting.  Request that FEMP provide a UESC/ESPC course for DOS in the DC area.	Host a FEMP Sponsored UESC/ESPC Course at one of our DOS buildings.

## Goal 9: Electronics Stewardship & Data Centers

### Electronics Stewardship Goals

E.O. 13693 Section 3(1) requires that agencies promote electronics stewardship, including procurement preference for environmentally sustainable electronic products; establishing and implementing policies to enable power management, duplex printing, and other energy efficient or environmentally sustainable features on all eligible agency electronic products; and employing environmentally sound practices with respect to the agency's disposition of all agency excess or surplus electronic products.

### Agency Progress in Meeting Electronics Stewardship Goals

**Chart: Insert chart(s) on progress towards procurement goal, power management goal, and end of life goal**

EPEAT	POWER MANAGEMENT	DISPOSITION
<div>100.0%</div> <p>Percentage of monitors, PCs and laptops acquired by the agency that meet EPEAT-registry standards</p>	<div>100.0%</div> <p>Percentage of monitors, PCs and laptops with power management-enabled</p>	<div>100.0% *</div> <p>Percentage of agency electronics disposed of using environmentally sound methods<sup>1,2</sup></p>

### Data Center Optimization Goal

E.O. 13693 Section 3(a) states that agencies must improve data center efficiency at agency facilities, and requires that agencies establish a power usage effectiveness target in the range of 1.2-1.4 for new data centers and less than 1.5 for existing data centers.

### Electronics Stewardship Strategies for Fiscal Year 2018

Strategy	Strategy Narrative	Targets and Metrics
Use government-wide category management vehicles to ensure procurement of equipment that meets sustainable electronics criteria.	Comply with OMB Category Management Policy 15-1, which requires the use of government-wide acquisition vehicles. These contracts offer IT equipment that meet the government's sustainability criteria.	(1) Complete the transition to NASA Solutions for Enterprise-Wide Procurement (SEWP V) contract vehicle. (2) Publish updated policy and purchasing guidance by the end of 2017 to ensure Department-wide use of strategic sourcing contracts.

Strategy	Strategy Narrative	Targets and Metrics
Enable and maintain power management on all eligible electronics; measure and report compliance.	The Department has adjusted the power management program to exempt equipment based on cybersecurity initiatives and on-going business operational requirements. The Department has deployed a power management agent on 100% of the eligible equipment.	Continuous monitoring and deployment of power management agents on all eligible hardware.
Implement automatic duplexing and other print management features on all eligible agency computers and imaging equipment; measure and report compliance.	The Department has implemented automatic duplexing and other print management features on all eligible agency computers and imaging equipment.	Adhere to the Department's Green Printing Policy Initiative, reduce number of desktop printers, and utilize network print devices configured with environmentally friendly printer setting as the default.
Ensure environmentally sound disposition of all agency excess and surplus electronics, consistent with federal policies on recycling & disposal of electronic assets, and measure and report compliance.	Adhere to the Department's current lifecycle replacement schedule.	The Department will continue to use the web-enabled platform GSAXcess to dispose of end-of-life equipment.

### Data Center Optimization Strategies for Fiscal Year 2018

Strategy	Strategy Narrative	Targets and Metrics
Develop, issue, and implement policies, procedures, and guidance for data center energy optimization, efficiency, and performance.	Create and maintain data center governance and policies in order to meet the optimization requirements per Data Center Optimization Initiative (DCOI). Use the American Society of Heating, Refrigerating, and Air-Conditioning Engineers thermal guidelines for Data Processing Environments.	Meet the DCOI-mandated government-wide optimization targets for tiered data centers for Energy Metering (100%); PUE ( $\leq 1.5$ ( $\leq 1.4$ for new data centers)); Virtualization ( $\geq 4$ ); Server Utilization & Automated Monitoring ( $\geq 65\%$ ); and Facility Utilization ( $\geq 80\%$ ).
Install and monitor advanced energy meters in all data centers (by FY 2018), actively manage energy, and power usage effectiveness.	Install meters to meet PUE monitoring requirements per ASHRAE 90.4 for the Department's core data centers (hosted by ESOC).	Follow DCOI guidance to meet metrics requirements for data centers. Install meters in tier data centers by Q4 FY 2017 and meet PUE of less than 1.5 for existing core data centers hosted by ESOC, and PUE 1.4 for new data centers.

Strategy	Strategy Narrative	Targets and Metrics
Minimize total cost of ownership in core data centers, increase energy efficiencies, and shift services and applications to cloud computing operations.	As part of developing the Department's plan and inventory of data centers, determine the status of energy efficiency and performance to drive consolidation and shift to the commercial cloud. Implement Software Defined Data Center (SDDC) technology for ESOC. Provide the ability to turn servers on and off (elasticity) based on automated policies for ESOC.	For core data centers, meet server consolidation and virtualization efforts to meet DCOI targets. Increase the quality of cloud computing reporting. Deploy limited SDDC capability across three core data centers by Q4 2018
Identify, consolidate, and migrate obsolete, underutilized, and inefficient data centers to more efficient data centers or cloud providers; close unneeded data centers.	Compile a comprehensive list of Department data centers to include data fields for determining Metric Target Values. The list is based on FDCCI data and new data collected through DOS bureau outreach in accordance with DCOI requirements. Analyze list and determine criteria for recommending closures.	Identify and collaborate with owners of data centers that do not meet DCOI metrics to recommend closures. Virtualize all systems that are capable of being virtualized, and consolidate them into ESOC Core data centers.
Improve data center temperature and air-flow management to capture energy savings.	As part of the Department's data center planning efforts, identify data centers that require improved temperature and air-flow management for energy efficiencies.	For the Department's core data centers, IRM will develop plans to meet or exceed the PUE metrics detailed in the DCOI, and to evaluate data center equipment operating parameters by Q4 2018
Assign certified Data Center Energy Practitioner(s) to manage core data center(s).	For the Department's core data centers, identify qualified individuals to serve as Energy Practitioners for tiered data centers.	The Department added two DCEP-certified individuals to core data centers in FY 2016, and the Department will continue to ensure certified Energy Practitioners are assigned to core data centers.

## Goal 10: Climate Change Adaptation and Resilience

E.O. 13653, *Preparing the United States for the Impacts of Climate Change*, outlines Federal agency responsibilities to modernize Federal programs to support climate resilient investment; manage lands and waters for climate preparedness and resilience; provide information, data and tools for climate change preparedness and resilience; and strategically plan for climate change related risk. E.O. 13653 requires agencies to develop, implement, and regularly update Adaptation Plans, and report on progress on those plans through their annual Strategic Sustainability Performance Plans.

E.O. 13693 Section 3(h)(viii) states that as part of building efficiency, performance, and management, agencies should incorporate climate-resilient design and management elements into the operation, repair, and renovation of existing agency buildings and the design of new agency buildings. Section 13(a) requires agencies to identify and address projected impacts of climate change on mission critical water, energy, communication, and transportation demands and consider those climate impacts in operational preparedness planning for major agency facilities and operations. Section 13(b) requires agencies to calculate the potential cost and risk to mission associated with agency operations that do not take into account such information and consider that cost in agency decision-making.

### Climate Change Adaptation and Resilience Strategies for Fiscal Year 2018

Strategy	Strategy Narrative	Targets and Metrics
Strengthen agency <i>external</i> mission, programs, policies and operations (including grants, loans, technical assistance, etc.) to incentivize planning for, and addressing the impacts of, climate change.	The Department helps disseminate adaptation solutions worldwide by sharing best practices, including from its global facilities and missions, to help maintain hard-won development gains, enhance the resilience of economic sectors, reduce risks of dislocation, address implications for U.S. national security, and reduce human impacts on the environment.	Ensure sharing of best practices from US private industry in bilateral and multilateral discussions.
Update and strengthen agency <i>internal</i> mission, programs, policies, and operations to align with the Guiding Principles, including facility acquisition, planning, design, training, and asset management processes, to incentivize planning for and addressing the impacts of climate change.	The Department ensures that all new construction and major renovations adhere to LEED Silver or higher, which includes considerations for siting. The Department also is examining supply chain risks through its Integrated Logistics Management System (ILMS).	Continue to plan for impacts of extreme weather, drought, flood or other natural disasters on Department facilities.
Ensure climate change adaptation is integrated into both agency-wide and regional planning efforts, in coordination with other Federal agencies as well as state and local partners, Tribal governments, and private stakeholders.	The Department is undertaking several efforts to increase planning on the regional scale to help reduce costs and identify supply chain vulnerabilities.	Regionalize appropriate services.

## **Appendix A**

*Instructions: Appendices should be uploaded as separate documents. When the SSPP is publicly released, appendices should be attached to the document. Please note that per the 2017 Instructions, the Procurement Plan and Agency Climate Change Adaptation Planning – FY2018 Actions document will NOT be publicly released.*